IN THE CLAIMS:

Please amend the claims as follows.

1.   (Original) A method for mapping a texture image, which is stored in a memory of a computer system, to a graphical object, which is stored in the memory, the method comprising:

determining whole and fractional portions of one or more texture coordinates of a pixel of the graphical object in an address space of the texture image;

selecting from the texture image two or more texels which correspond to a first of the texture coordinates of the pixel and each of which has a color;

selecting a pair of complementary coefficients from a table, stored in the memory, of predetermined complementary coefficients according to the fractional portion of the first texture coordinate of the pixel; and

calculating a weighted average of the color of a first of the texels and the color of a second of the texels according to the pair of complementary coefficients to produce an interpolated texel color.

2.   (Original) The method of Claim 1 wherein the step of calculating comprises:

(a)   weighting the color of the first texel with a first coefficient of the pair of complementary coefficients to produce a first weighted color;

(b)   weighting the color of the second texel with a second coefficient of the pair of complementary coefficients to produce a second weighted color; and

(c)   summing the first and second weighted colors to produce the interpolated texel color.

3.   (Original) The method of Claim 2 further comprising loading, in a single load operation, the pair of complementary coefficients into a processor in which steps (a) and (b) are performed.

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4. (Original) The method of Claim 2 wherein each color includes two or more partitioned components;

further wherein step (a) comprises multiplying each partitioned component of the color of the first texel with the first coefficient substantially simultaneously in a first partitioned multiplication operation; and

further wherein step (b) comprises multiplying each partitioned component of the color of the second texel with the second coefficient substantially simultaneously in a second partitioned multiplication operation.

5. (Original) The method of Claim 2 wherein each color includes two or more partitioned components;

further wherein step (c) comprises adding each partitioned component of the color of the first texel to a respective partitioned component of the color of the second texel.

6. (Original) The method of Claim 1 further comprising:

calculating a weighted average of the color of a third of the texels and the color of a fourth of the texels according to the pair of complementary coefficients; and

combining the weighted average of the colors of the third and fourth texels with the weighted average of the colors of the first and second texels to produce the interpolated texel color.

7. (Original) The method of Claim 6 further comprising:

loading the pair of complementary coefficients into a processor in which the step of calculating a weighted average color of the third and fourth texels and the step of calculating a weighted average color of the first and second texels; and

preserving the state of the pair of complementary coefficients in the processor such that data representing the pair of complementary coefficients within the processor remain unchanged throughout performance of the step of

calculating a weighted average color of the first and second texels and the step of calculating a weighted average color of the third and fourth texels.

8. (Original) The method of Claim 6 wherein the step of calculating comprises:

(a) weighting the color of the third texel with the first coefficient to produce a third weighted color;

(b) weighting the color of the fourth texel with the second coefficient to produce a fourth weighted color; and

(c) summing the third and fourth weighted colors to produce the second weighted average color.

9. (Original) The method of Claim 8 further comprising loading, in a single load operation, the pair of complementary coefficients into a processor in which steps (a) and (b) are performed.

10. (Original) The method of Claim 6 further comprising:

selecting a second pair of complementary coefficients from a second table of predetermined complementary coefficients according to the fractional portion of a second of the coordinates of the pixel; and

calculating a weighted average of the first and second weighted average colors according to the second pair of complementary coefficients to produce a composite weighted average color.

11. (Original) The method of Claim 10 wherein the first-mentioned pair of complementary coefficients is the same as the second pair of complementary coefficients.

12. (Original) The method of Claim 10 wherein the first-mentioned table of predetermined complementary coefficients and the second table of predetermined complementary coefficients are the same.

13. (Original) The method of Claim 10 wherein the step of calculating comprises:

(a)   weighting the first weighted average color with a first coefficient of the second pair of complementary coefficients to produce a first weighted color;

(b)   weighting the second weighted average color with a second coefficient of the second pair of complementary coefficients to produce a second weighted color; and

(c)   summing the first and second weighted colors to produce the composite weighted average color.

14.   (Original) The method of Claim 1 further comprising:

forming each pair of complementary coefficients of the table such that the sum of the complementary coefficients of each pair of complementary coefficients of the table is equal to each other sum of the complementary coefficients of each other pair of the table and is a selected number.

15.   (Original) The method of Claim 14 further comprising:

selecting the selected number such that each weighted average color calculated according to any of the pairs of complementary coefficients is scaled to be within a full range of possible colors.

16.   (Currently Amended) A method for mapping a texture image, which is stored in a memory of a computer system and which includes two or more texture subimages corresponding to a particular respective degrees of minification of the texture image, to a graphical object, the method comprising:

using the computer system to perform:

determining whole and fractional portions of a degree of minification corresponding to a pixel of the graphical object;

selecting from the texture image first and second texture sub-images which correspond to the degree of minification of the pixel;

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providing from each of the first and second texture sub-images a respective texel, each of which has a color and each of which corresponds to the pixel;

selecting a pair of complementary coefficients from a table of predetermined complementary coefficients according to the fractional portion of the degree of minification of the pixel; and

calculating a weighted average of the color of the texel provided from the first texture sub-image and the color of the texel provided from the second texture sub-image according to the pair of complementary coefficients to produce an interpolated texel color.

17-64. (Cancelled)

65.   (New) A system for mapping a texture image, which is stored in a memory, to a graphical object, which is stored in the memory, comprising:

at least one processor; and

a storage media having stored thereon program instructions executable by the at least one processor to perform:

determining whole and fractional portions of one or more texture coordinates of a pixel of the graphical object in an address space of the texture image;

selecting from the texture image two or more texels which correspond to a first of the texture coordinates of the pixel and each of which has a color;

selecting a pair of complementary coefficients from a table, stored in the memory, of predetermined complementary coefficients according to the fractional portion of the first texture coordinate of the pixel; and

calculating a weighted average of the color of a first of the texels and the color of a second of the texels according to the pair of complementary coefficients to produce an interpolated texel color.

66.   (New) The system of Claim 65 wherein calculating the weighted average comprises:

   (a)   weighting the color of the first texel with a first coefficient of the pair of complementary coefficients to produce a first weighted color;

   (b)   weighting the color of the second texel with a second coefficient of the pair of complementary coefficients to produce a second weighted color; and

   (c)   summing the first and second weighted colors to produce the interpolated texel color.

67.   (New) The system of Claim 66 wherein the program instructions are further executable to perform loading, in a single load operation, the pair of complementary coefficients into a processor in which steps (a) and (b) are performed.

68.   (New) The system of Claim 66 wherein each color includes two or more partitioned components;

   further wherein (a) comprises multiplying each partitioned component of the color of the first texel with the first coefficient substantially simultaneously in a first partitioned multiplication operation; and

   further wherein (b) comprises multiplying each partitioned component of the color of the second texel with the second coefficient substantially simultaneously in a second partitioned multiplication operation.

69.   (New) The system of Claim 66 wherein each color includes two or more partitioned components;

   further wherein (c) comprises adding each partitioned component of the color of the first texel to a respective partitioned component of the color of the second texel.

70.   (New) The system of Claim 65 wherein the program instructions are further executable to perform:

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calculating a weighted average of the color of a third of the texels and the color of a fourth of the texels according to the pair of complementary coefficients; and

combining the weighted average of the colors of the third and fourth texels with the weighted average of the colors of the first and second texels to produce the interpolated texel color.

71.   (New) The system of Claim 70 wherein the program instructions are further executable to perform:

loading the pair of complementary coefficients into a processor in which the step of calculating a weighted average color of the third and fourth texels and the step of calculating a weighted average color of the first and second texels; and

preserving the state of the pair of complementary coefficients in the processor such that data representing the pair of complementary coefficients within the processor remain unchanged throughout performance of the step of calculating a weighted average color of the first and second texels and the step of calculating a weighted average color of the third and fourth texels.

72.   (New) The system of Claim 70 wherein calculating the weighted average comprises:

(a)   weighting the color of the third texel with the first coefficient to produce a third weighted color;

(b)   weighting the color of the fourth texel with the second coefficient to produce a fourth weighted color; and

(c)   summing the third and fourth weighted colors to produce the second weighted average color.

73.   (New) The system of Claim 72 wherein the program instructions are further executable to perform loading, in a single load operation, the pair of complementary coefficients into a processor in which steps (a) and (b) are performed.

74.   (New) The system of Claim 70 wherein the program instructions are further executable to perform:

selecting a second pair of complementary coefficients from a second table of predetermined complementary coefficients according to the fractional portion of a second of the coordinates of the pixel; and

calculating a weighted average of the first and second weighted average colors according to the second pair of complementary coefficients to produce a composite weighted average color.

75.   (New) The system of Claim 74 wherein the first-mentioned pair of complementary coefficients is the same as the second pair of complementary coefficients.

76.   (New) The system of Claim 74 wherein the first-mentioned table of predetermined complementary coefficients and the second table of predetermined complementary coefficients are the same.

77.   (New) The system of Claim 74 wherein calculating the weighted average comprises:

(a)   weighting the first weighted average color with a first coefficient of the second pair of complementary coefficients to produce a first weighted color;

(b)   weighting the second weighted average color with a second coefficient of the second pair of complementary coefficients to produce a second weighted color; and

(c)   summing the first and second weighted colors to produce the composite weighted average color.

78.   (New) The system of Claim 65 wherein the program instructions are further executable to perform:

forming each pair of complementary coefficients of the table such that the sum of the complementary coefficients of each pair of complementary

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coefficients of the table is equal to each other sum of the complementary coefficients of each other pair of the table and is a selected number.

79.   (New) The system of Claim 78 wherein the program instructions are further executable to perform:

selecting the selected number such that each weighted average color calculated according to any of the pairs of complementary coefficients is scaled to be within a full range of possible colors.

80.   (New) A storage media having stored thereon program instructions executable by a computing device to perform a method for mapping a texture image, which is stored in a memory, to a graphical object, which is stored in the memory, the method comprising:

determining whole and fractional portions of one or more texture coordinates of a pixel of the graphical object in an address space of the texture image;

selecting from the texture image two or more texels which correspond to a first of the texture coordinates of the pixel and each of which has a color;

selecting a pair of complementary coefficients from a table, stored in the memory, of predetermined complementary coefficients according to the fractional portion of the first texture coordinate of the pixel; and

calculating a weighted average of the color of a first of the texels and the color of a second of the texels according to the pair of complementary coefficients to produce an interpolated texel color.

81.   (New) The storage media of Claim 80 wherein calculating the weighted average comprises:

(a)   weighting the color of the first texel with a first coefficient of the pair of complementary coefficients to produce a first weighted color;

(b)   weighting the color of the second texel with a second coefficient of the pair of complementary coefficients to produce a second weighted color; and

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(c)   summing the first and second weighted colors to produce the interpolated texel color.

82.   (New) The storage media of Claim 81 wherein the method further comprises loading, in a single load operation, the pair of complementary coefficients into a processor in which steps (a) and (b) are performed.

83.   (New) The storage media of Claim 81 wherein each color includes two or more partitioned components;

further wherein step (a) comprises multiplying each partitioned component of the color of the first texel with the first coefficient substantially simultaneously in a first partitioned multiplication operation; and

further wherein step (b) comprises multiplying each partitioned component of the color of the second texel with the second coefficient substantially simultaneously in a second partitioned multiplication operation.

84.   (New) The storage media of Claim 81 wherein each color includes two or more partitioned components;

further wherein step (c) comprises adding each partitioned component of the color of the first texel to a respective partitioned component of the color of the second texel.

85.   (New) The storage media of Claim 80 wherein the method further comprises:
calculating a weighted average of the color of a third of the texels and the color of a fourth of the texels according to the pair of complementary coefficients; and

combining the weighted average of the colors of the third and fourth texels with the weighted average of the colors of the first and second texels to produce the interpolated texel color.

86.   (New) The storage media of Claim 85 wherein the method further comprises:

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loading the pair of complementary coefficients into a processor in which
the step of calculating a weighted average color of the third and fourth texels and
the step of calculating a weighted average color of the first and second texels; and

preserving the state of the pair of complementary coefficients in the
processor such that data representing the pair of complementary coefficients
within the processor remain unchanged throughout performance of the step of
calculating a weighted average color of the first and second texels and the step of
calculating a weighted average color of the third and fourth texels.

87.   (New) The storage media of Claim 85 wherein calculating the weighted average
comprises:

(a)   weighting the color of the third texel with the first coefficient to
produce a third weighted color;

(b)   weighting the color of the fourth texel with the second coefficient
to produce a fourth weighted color; and

(c)   summing the third and fourth weighted colors to produce the
second weighted average color.

88.   (New) The storage media of Claim 87 wherein the method further comprises
loading, in a single load operation, the pair of complementary coefficients into a
processor in which steps (a) and (b) are performed.

89.   (New) The storage media of Claim 85 wherein the method further comprises:

selecting a second pair of complementary coefficients from a second table
of predetermined complementary coefficients according to the fractional portion
of a second of the coordinates of the pixel; and

calculating a weighted average of the first and second weighted average
colors according to the second pair of complementary coefficients to produce a
composite weighted average color.

90.   (New) The storage media of Claim 89 wherein the first-mentioned pair of complementary coefficients is the same as the second pair of complementary coefficients.

91.   (New) The storage media of Claim 89 wherein the first-mentioned table of predetermined complementary coefficients and the second table of predetermined complementary coefficients are the same.

92.   (New) The storage media of Claim 89 wherein calculating the weighted average comprises:

   (a)   weighting the first weighted average color with a first coefficient of the second pair of complementary coefficients to produce a first weighted color;

   (b)   weighting the second weighted average color with a second coefficient of the second pair of complementary coefficients to produce a second weighted color; and

   (c)   summing the first and second weighted colors to produce the composite weighted average color.

93.   (New) The storage media of Claim 80 wherein the method further comprises:
        forming each pair of complementary coefficients of the table such that the sum of the complementary coefficients of each pair of complementary coefficients of the table is equal to each other sum of the complementary coefficients of each other pair of the table and is a selected number.

94.   (New) The storage media of Claim 93 wherein the method further comprises:
        selecting the selected number such that each weighted average color calculated according to any of the pairs of complementary coefficients is scaled to be within a full range of possible colors.